



**New Jersey's
Long-Range Plan for Higher Education
~Stage 1~**

*A Blueprint for
Excellence*

NJ Commission on Higher Education

November 2003

New Jersey Commission on Higher Education

Mr. Laurence M. Downes
Chairman

Mr. William M. Freeman
Vice Chairman

Ms. Jenny Buontempo

Mr. Kevin J. Collins

Dr. Stuart D. Cook

Dr. Cecile A. Feldman

Dr. Amy H. Handlin

Mr. Rishi S. Jaitley

Dr. Henry C. Johnson

Mr. Alfred C. Koeppe

Mr. Warren E. Smith

Long-Range Plan Steering Committee Members

Mr. Laurence Downes

Chairman, Commission on Higher Education
Chairman, Long-Range Plan Steering Committee

Mr. Robert Campbell, Chair
Board of Trustees, Robert Wood Johnson Foundation

Ms. Ruth Charbonneau, Staff
Commission on Health Science,
Education and Training

Dr. Stuart Cook, President
University of Medicine & Dentistry of NJ

Ms. Lucille Davy
Special Counsel to Governor for Education

Mr. Robert Durkee, Vice President
Princeton University (Rep. Prosperity NJ)

Mr. William Freeman, Vice Chairman
Commission

Mr. Kenneth Hahn, Member
Board of Trustees, Centenary College

Dr. Amy Handlin
Commission Member

Mr. Alfred Koeppe
Commission Member

Dr. William Librera, Commissioner
Department of Education

Mr. Eugene O'Hara, Chair
Board of Governors, Rutgers University

Dr. Jeanne Oswald
Deputy Executive Director
Commission

Mr. James Perry, Vice Chair
Board of Trustees, Union County College

Ms. Sherrie Preische, Staff
Jobs Growth and Economic Development Commission

Dr. George Pruitt, President
Thomas Edison State College

Dr. Henry Pruitt, Member
Board of Trustees, William Paterson University

Dr. James E. Sulton, Jr.
Executive Director, Commission

Mr. Roy Vagelos, Chair
Commission on Health Science,
Education and Training

Sister Patrice Werner, President
Caldwell College

Dr. Edward Yaw, President
County College of Morris

TABLE OF CONTENTS

	Page
Overview	1
Vision	2
Principal State Objectives	2
Key Performance Measures	3
Action Plans	6
Objective I: Quality	6
Objective II: Capacity	12
Objective III: Student financial aid	18
Objective IV: State support for institutions	22
Objective V: P-20 collaboration	31
Objective VI: Partnerships with business and other sectors	36
Objective VII: Public research university restructuring	39
Conclusion	39
Appendices	40

New Jersey's Long-Range Plan for Higher Education

A BLUEPRINT FOR EXCELLENCE - STAGE 1

Overview

Higher education has become increasingly important to the success and the quality of life of individuals, states, and the nation. New Jersey's economic competitiveness and prosperity are directly related to the quality and capacity of its colleges and universities, which develop human potential and discover and apply knowledge through teaching, research, and service. It is essential that New Jersey harness the intellectual power of higher education to propel the economy forward and serve the needs of the state and its citizens.

Consistent with its statutory responsibility, the New Jersey Commission on Higher Education, in collaboration with the Presidents' Council, institutional board of trustee representatives, and other stakeholders, began facilitating the development of a long-range plan for higher education in April 2002. This plan includes a vision for higher education, seven principal state objectives, and initial action plans and performance measures. **It also proposes an unprecedented new compact between the state and higher education, calling for a significant state investment and a measurable return on that investment by institutions.**

The plan calls for using the state's additional investment in higher education to do the following:

- Achieve greater levels of excellence
- Increase capacity
- Expand student aid
- Expand collaboration with the P-12 community and among institutions
- Create innovative partnerships with business and other sectors
- Dramatically expand research and excellence by restructuring the public research universities

Colleges and universities in New Jersey will need increased and predictable operating support and a major infusion of capital funds to help meet these growing expectations.

Over 500 stakeholders, including business leaders, government officials, legislative staff, community leaders, students, parents, trustees, faculty, alumni, college administrators, and others have been involved in the planning process. Stakeholders served on issue teams, attended conferences, and provided feedback on the Stage 1 draft plan through public forums and written commentary. The Commission on Higher Education adopted Stage 1 of the plan in November 2003, affirming direction and preliminary implementation. Stage 2 of the planning process will integrate the work of related initiatives and further develop annual performance measures and action plans.

The long-range plan has been developed to achieve the following vision for the state:

*New Jersey and its colleges and universities
embrace their shared responsibility to create and sustain
a higher education system that is among the best in the world,
enabling all people to achieve their maximum potential, fostering
democratic principles, improving the quality of life, and
supporting the state's success in a global economy.*

To achieve this vision, recommendations were developed in four categories: Quality, Capacity, Resources, and Collaboration. Within those four areas, seven principal state objectives were identified to realize the vision. Achievement of these objectives is dependent upon a state and institutional commitment to the compact.

PRINCIPAL STATE OBJECTIVES

The Foundation of the State Plan for Higher Education

- I. Achieve and sustain higher levels of excellence in teaching and learning, research, and public service in all sectors, valuing differences in institutional missions and using resources effectively and efficiently.
- II. Support targeted, multifaceted increases in capacity and specific state and campus programs to (1) prepare a growing and increasingly diverse population for responsible citizenship in a democratic society, and (2) attract more New Jersey students to New Jersey institutions and prepare them for high-demand occupations.
- III. Support financial aid programs that enable New Jersey students from all backgrounds to afford higher education of high quality.
- IV. Establish and implement funding policies and methodologies that provide sufficient and reasonably predictable state operating support and ongoing state capital investments for the public research universities, state colleges and universities, community colleges, and independent institutions to provide the fundamental infrastructure necessary to achieve the state's vision for higher education.

- V. Encourage and enhance coordination and collaboration between and among all educational institutions in the state, including P-12 schools and associate and baccalaureate degree-granting institutions, to facilitate transition from each educational level to the next, to develop mutually beneficial partnerships, and to improve the quality of teaching and learning at all levels.
- VI. Encourage and expedite systemic, innovative, and institutionalized partnerships and other collaborations between higher education and other sectors of society, including business and industry, the nonprofit sector, and the public sector to help meet the state's most pressing workforce needs and to create nationally competitive programs of research and development.
- VII. Restructure the public research universities to improve (1) the overall educational excellence of the universities; (2) collaboration in teaching, research, and service; and (3) the state's competitiveness for federal and other support for biomedical, biotechnology, and related research.

The adoption of these principal objectives provided the foundation to propose initial action plans (Appendix A, page 40) and identify key performance measures related to their implementation. Achievement of the objectives through the coordinated efforts of boards of trustees, presidents, the Commission on Higher Education, state leaders, and other stakeholders will make the vision for higher education a reality.

KEY PERFORMANCE MEASURES 2004 THROUGH 2010

The following key performance measures will be further developed during Stage 2 of the planning process. To varying degrees, full achievement of these measures will be influenced by levels of state operating aid and capital support, student tuition and fees, and external support. In the initial years, progress may be modest on some measures given the time necessary to achieve results.

- A. New Jersey's colleges and universities will make defined annual progress toward providing access to high-quality higher education opportunities for between 406,000 and 411,000 students, an increase of 45,000 to 50,000 students.
- B. Coordination and collaboration between and among educational institutions will increase in measurable ways to improve student achievement and success, to expand access, and to enhance efficiency.
- C. Alignment between higher education admissions-related requirements and P-12 curriculum frameworks, standards, and tests will decrease the need of recent high school graduates for college-level remediation by defined annual percentages.

- D. Colleges and universities will achieve their institution-specific student outcome improvement targets through defined annual progress.
- E. Both the percentage of full-time undergraduate students who complete their baccalaureate degrees in four years or less, and the percentage of full-time undergraduates who complete their baccalaureate degrees in six years, will increase by at least 10 percent through defined annual progress.
- F. The retention and graduation rates of a steadily increasing number of low-income and minority students will increase by at least 20 percent through defined annual progress.
- G. As enrollments increase, colleges and universities will prepare significantly more graduates in high-demand areas to meet the most critical workforce needs identified for New Jersey.
- H. The level of employer satisfaction with student preparedness for the workforce will increase by a minimum of 25 percent from a baseline established in 2004.
- I. New Jersey will increase its current national ranking of 20th to at least 15th in aggregate share of federal research dollars.
- J. State support and steadily increasing university competitiveness for federal and other research dollars will lead, where consistent with mission, to greater commercialization of intellectual property from the baseline established in 2004.
- K. New Jersey colleges and universities will attain increased regional and national recognition of institutional programs and achievements through defined institutional efforts in targeted areas.
- L. As enrollments increase, state funding for student financial aid programs will be expanded proportionately each year to meet the needs of the growing number of eligible students.
- M. State policies and funding methodologies for operating support of colleges and universities in each sector will be linked to state goals, and annual funding will be consistent with methodologies and defined state targets.
- N. The state will provide significant additional capital support for higher education to enhance quality and preserve and expand campuses consistent with defined annual capacity targets and other principal state objectives.
- O. Colleges and universities will increase private, nontuition revenues by a defined annual percentage.

(A chart relating key performance measures to the principal objectives and major issue categories is available in Appendix B, page 42. Underlying data for the plan are cited in footnotes or summarized in Appendix C.)

NEXT STEPS

The blueprint for higher education through 2010 is already guiding efforts to create and sustain a system of colleges and universities that is among the best in the world. Preliminary process steps were undertaken during the summer and early fall of 2003 to pave the way for initial implementation. During Stage 2 of the planning process, performance measures will be further developed, and recommendations regarding research universities and economic development will be integrated into the long-range plan. The plan will then be reviewed annually and revised as needed based on progress and changes in circumstances.

Action Plans

OBJECTIVE I

ACHIEVE AND SUSTAIN HIGHER LEVELS OF EXCELLENCE IN TEACHING AND LEARNING, RESEARCH, AND PUBLIC SERVICE IN ALL SECTORS, VALUING DIFFERENCES IN INSTITUTIONAL MISSIONS AND USING RESOURCES EFFECTIVELY AND EFFICIENTLY.

RATIONALE

The quality of teaching and learning, research, and service at the colleges and universities in a state has an enormous impact on the overall competitiveness of the state and its economic strength and societal well-being. Efficiently increasing the level of excellence of programs and outcomes at New Jersey's rich array of higher education institutions is essential to realizing New Jersey's vision for higher education. Enhanced excellence – in the arts and humanities, in the sciences and engineering, and in a broad range of professional fields – will benefit New Jersey's students; attract additional talented faculty members; better prepare individuals for the future; improve workforce development; draw and retain business and industry in New Jersey; and enhance research that is essential to educational, social, technological, and economic progress and innovation.

The development and maintenance of an excellent system of higher education will require deliberate planning, ongoing investment, and commitment to a new compact between higher education and the state. Adequate and predictable state funding and institutional accountability are essential to support quality programs and services in all disciplines. In addition, the targeted strategies described below are necessary to move New Jersey higher education to the upper echelon nationally.

COMPONENTS TO ACHIEVE OBJECTIVE 1

COMPONENT 1 – Faculty

Because of their primary role in teaching and learning, faculty members are critical to student outcomes and institutional quality. Regardless of the type of institution or its mission, an adequate core of faculty is essential as is the provision of professional growth opportunities for all faculty members.

Initial Action Plan

Each institution should do the following:

- Develop by April 2004 faculty composition targets (e.g., part-time and full-time) appropriate to its mission, considering responsibilities assumed by and proportion of sections and kinds of courses taught by different faculty classifications.
- Develop by June 2005 a plan to strengthen full- and part-time faculty development programs.

The Commission on Higher Education will survey institutions in 2007 and 2010 on their progress in achieving institutionally specific faculty composition targets and development plans.

COMPONENT 2 – Student Outcomes

Assessment of student outcomes is the key step to institutional improvement and excellence. By identifying expected outcomes and analyzing resultant data, institutions can improve educational quality and effectiveness.

Initial Action Plan

Each institution should develop by June 2004 and achieve through 2010 annual goals to improve student persistence, transfer and/or graduation rates, time to degree or program completion, learning outcomes, student and alumni satisfaction, job placement rates and/or acceptance into graduate or professional programs, as well as other measures of student outcomes it identifies as appropriate to its mission. A special focus should be placed on disaggregating the data for and improving the success of groups traditionally underrepresented on college campuses.

The Middle States Commission on Higher Education has identified fundamental elements of assessment of student learning that characterize accredited institutions. There are forty-six institutions in New Jersey that are accredited by the Middle States Commission and required by them to have a student learning assessment process and ensure its use.¹

COMPONENT 3 – Public Service

Colleges and universities provide public service through faculty, staff, and students, ranging from faculty sharing professional expertise to solve problems to students engaged in internships. Public service significantly expands the boundaries of the institution, promoting democratic principles and maximizing human potential.

¹ Middle States Commission on Higher Education, *Characteristics of Excellence: Eligibility Requirements and Standards for Accreditation*, 2002.

Initial Action Plan

Colleges and universities should reflect the value of service in their teaching and research and engage students, faculty, and staff in public service on and off campus, reaching out to the community, state, nation, and world and imparting lifelong civic responsibility.

Each institution should expand, consistent with its mission, the level of student participation in learning experiences outside the classroom, including, but not limited to, co-curricular offerings, off-campus learning experiences such as internships, mentoring, public service, service learning, and international study, and, as appropriate, residential programming.

The Commission on Higher Education will survey institutions in 2007 and 2010 on their progress in enhancing on- and off-campus public service.

COMPONENT 4 – Enhancement of Research

The quality of institutional research, particularly at research universities, is critical to the competitiveness of both the institutions and the state. Strategic efforts to enhance research and increase the amount of federal and other research dollars coming to colleges and universities in the state can significantly improve the economy and quality of life in New Jersey.

Initial Action Plan

The leadership of the research universities, and other institutions and organizations where appropriate, should work with the Commission on Higher Education to establish goals for increasing New Jersey's current national ranking² in aggregate share of federal research dollars from 20th to at least 15th.

Research universities, and other institutions where appropriate to their mission, should develop tactical plans to increase significantly external research dollars garnered in areas that are high priorities for New Jersey. Plans should include projected incremental increases in external funding against which progress is measured and reported. By July 2010, institutional funding targets should be achieved.

New Jersey's colleges and universities, where appropriate to their mission, should collaborate with the Commission on Jobs Growth and Economic Development, Prosperity New Jersey, and other organizations to develop programs that support joint ventures and entrepreneurial frameworks for the creation and commercialization of intellectual property.

² National Science Foundation, WebCASPER Database System, Federally Financed R&D Expenditures for 2001.

COMPONENT 5 – Support New Jersey’s Major Clusters

Clusters are geographic concentrations of interconnected companies, specialized suppliers, service providers, and associated institutions in a particular field. New Jersey is engaging in a collaborative initiative, through the Jobs Growth and Economic Development Commission, to ensure continued leadership in five major fields: information technology, biomedical/life sciences, telecommunications, advanced materials, and devices and electronics. The state is already among the leaders in these fields, but its competitive position is threatened in some respects by major initiatives in other states. Higher education institutions, particularly research universities, will be critical in enhancing the state’s competitive position in these fields. The John J. Heldrich Center for Workforce Development at the Edward J. Bloustein School of Planning and Public Policy at Rutgers completed a Demand-Side Skills Assessment Project related to these fields in November 2003.

Initial Action Plan

It is anticipated that, through the recommendations of the Jobs Growth and Economic Development Commission, the state will make targeted investments to support research and workforce development in the five major fields.

The Commission on Higher Education should monitor degree completion relative to industry needs identified by the Demand-Side Skills Assessment Project and other analyses to ensure programs are sustained, expanded, or introduced to address the need for associate and baccalaureate degrees to support these fields. These programs, available at many institutions in New Jersey, will serve as the pipeline for this initiative.

Enhanced programmatic opportunities should result in incremental increases in advanced math and science degrees, which have already been identified as shortage areas, with targeted annual degree increases to be determined by the Demand-Side Skills Assessment Project and other analyses.

COMPONENT 6 – Collaborative Funding Opportunities

It is critical that institutions collaborate and make every effort to garner revenues available through external sources. Joint efforts to bring additional external funds to New Jersey must be a priority.

Initial Action Plan

By June 2004, the Presidents’ Council, working with the Commission on Higher Education and other entities as appropriate, should create a strategy for increasing consortial efforts to seek external funding for the following initiatives:

- Regional, statewide, or other consortial faculty development initiatives
- Initiatives intended to improve student retention and other outcomes

- Regional, statewide, or other consortial learning experiences outside the classroom
- Regional, statewide, or consortial research related to New Jersey's major industry clusters
- Other means of increasing institutional quality and effectiveness to serve the diverse needs of all students

COMPONENT 7 – Raising Public Awareness

The reputation and image of the state's higher education system directly affects the desirability of the state as a place to attend school, to operate a business, to pursue a career, and to live. States that have been in the forefront nationally in terms of economic growth and quality of life depend on the excellence, image, and visibility of their colleges and universities.

Initial Action Plan

The Commission on Higher Education should work with the Presidents' Council and state and business leaders to develop, fund, and begin implementing by summer 2004 a coordinated, multiyear public awareness campaign to raise the visibility and augment the reputation of New Jersey's colleges and universities within the state and nationally.

- The Commission on Higher Education and Presidents' Council should establish the initial charge for a Marketing Leadership Team. The charge should recognize the need for a broad group of stakeholders to be involved in the campaign, including trustees and students.
- The Marketing Leadership Team, composed largely of business and public sector leaders, should be formed and hold a kick-off planning retreat in December 2003.
- A New Jersey “most marketable assets” summary, including collaborative efforts as well as individual institution efforts, should be compiled by the Presidents' Council in collaboration with the Commission on Higher Education by January 2004.
- The Commission on Higher Education, in collaboration with the Presidents' Council and the Marketing Leadership Team, should complete a baseline public opinion awareness/attitude survey by February 2004. Follow-up awareness/attitude surveys should be completed biennially with comparisons to the baseline data. Awareness and attitudes should show improvement with each subsequent survey.

COMPONENT 8 – Long-Range Plan Accountability

This long-range plan for higher education includes action plans to achieve the principal state objectives and performance measures to monitor progress and guide state funding. The plan will be reviewed annually and revised as needed based on changes in external circumstances.

Initial Action Plan

State funding increases should be linked to principal state objectives and performance measures.

The Commission on Higher Education and Presidents' Council should track the progress made on all components of the action plan, and the Commission's annual systemwide accountability report should report the progress in meeting key performance measures.

The Commission and Presidents' Council should annually review progress in implementing the plan and recommend revisions or additions as external circumstances warrant.

The Commission's baseline report should be issued by July 2004 and annually each year thereafter.

OBJECTIVE II

SUPPORT TARGETED, MULTIFACETED INCREASES IN CAPACITY AND SPECIFIC STATE AND CAMPUS PROGRAMS TO (1) PREPARE A GROWING AND INCREASINGLY DIVERSE POPULATION FOR RESPONSIBLE CITIZENSHIP IN A DEMOCRATIC SOCIETY AND (2) ATTRACT MORE NEW JERSEY STUDENTS TO NEW JERSEY INSTITUTIONS AND PREPARE THEM FOR HIGH-DEMAND OCCUPATIONS.

RATIONALE

New Jersey is faced with a critical policy decision as to whether or not, and to what degree, it will invest in its colleges and universities to address an unprecedented demand for access to higher education. This decision will directly affect the state's economic development and prosperity. There is no ambiguity about the impending and unparalleled increase in demand for higher education by residents who reflect the rich diversity of New Jersey or about the acutely inadequate capacity of New Jersey's public and private higher education institutions to meet this demand.

The increased demand and diversity is attributable to several major circumstances:

- The number of high school graduates is projected to increase by 15,800 students between fall 2002 and 2008, when that number is expected to decline slightly and stabilize in 2012.³
- The growth rates for Asians will be 77 percent, Latinos 43 percent, African-Americans 14 percent, and Caucasians 6 percent.⁴
- The foreign-born population in New Jersey has increased by 53 percent in the last decade and is anticipated to continue to increase.⁵
- Compared with other states, colleges and universities in New Jersey have historically served a relatively smaller percentage (estimated to be 40 percent in 2002) of the state's recent high school graduates; the national average is 47 percent. Of the remaining graduates, about 28 percent leave the state to attend college, and 32 percent do not attend college within 12 months of graduation.⁶

³ Western Interstate Commission for Higher Education, *Knocking at the College Door: Projections of High School Graduates by State and Race/Ethnicity 1996-2012*, February 1998.

⁴ Ibid.

⁵ U.S. Bureau of the Census, Census 2000 Summary File 3.

⁶ U.S. Department of Education, National Center for Education Statistics, "Digest of Education Statistics, 2002," June 23, 2003.

- While the percentage of recent high school graduates that attend college in New Jersey is relatively small, it has increased from 37 percent to 40 percent in just four years, giving the institutions a larger share of the students as the total enrollment increases (Appendix C, page 44).
- Institutional capacity will need to be increased considerably in New Jersey to continue serving even 40 percent of the projected recent high school graduates.

The transition to a technology-driven, information-based economy increases the demand for well-educated, high-skilled workers. The benefits of the new economy and educational opportunity beyond a high school diploma must be available to all, ensuring a well-prepared citizenry and the skilled workforce necessary to maintain quality of life and the nation's preeminence. According to the Bureau of Labor Statistics, by 2006 seven out of ten jobs will require postsecondary education.⁷ But, an undeniable "digital divide" separates future workers into the technological "haves" and "have-nots." Educators face the difficult task of preparing individuals of all ages and backgrounds with a strong general education and complex workforce skills, allowing them to participate fully in the new economy.

This convergence of economic competitiveness, growing workforce demands, and demographic trends poses critical policy decisions for New Jersey. Increasing higher education capacity – to educate the growing number of recent high school graduates, to provide ongoing education to upgrade the skills of the current workforce, and to extend educational access to underrepresented groups – is an opportunity and an obligation deserving immediate statewide attention and resources. It will require new commitments and accountability for colleges and universities and a significant additional investment in higher education – an investment that is vital to New Jersey's prosperity in the knowledge-based, global economy.

COMPONENTS TO ACHIEVE THE OBJECTIVE

COMPONENT 1 – Increased Capacity to Serve More Students

For the most part, New Jersey's colleges and universities lack additional capacity to respond to the increasing demand. Statewide, the community colleges have experienced significant growth, with an average increase in students of more than 5 percent annually over the last four years. The community colleges also have a significant number of students taking noncredit courses, which also puts additional pressure on institutional capacity. Because the senior public sector is relatively small, New Jersey's public research universities and state colleges and universities rank 43rd of 50 states in public

⁷ U.S. Bureau of Labor Statistics, *Occupational Outlook Handbook, 2000-01 Edition*.

four-year enrollment per capita.⁸ These institutions have had an average increase in students of about 2 percent annually over the last four years, but they are unable to accommodate growing demands, especially given funding and facility constraints. The independent institutions have also been expanding enrollments to assist in meeting the state's capacity needs; some institutions in that sector are also at or near capacity.

While New Jersey ranks fifth among the states in the percentage of population with bachelor's degrees or higher, the state has the sixth highest outmigration rate of baccalaureate-seeking students in the nation (Appendix C, page 45). The potential loss of more students owing to lack of capacity does not bode well for workforce development and the economy. State, county, and institutional revenue will be necessary to support incremental growth through multiple means. The necessary expansion of services should not be dependent solely on new or enhanced facilities, although a state bond issue or dedicated revenue source will be essential to address facility renovation and construction needs. Significantly increased collaboration between and among the public and private senior institutions and community colleges, enhanced use of technology, and expanded facilities and human resources should all be employed strategically to increase the state's ability to meet the following needs:

- 1. Serve a larger portion of New Jersey's high school graduates annually, especially retaining talented and diverse students in the state.*
- 2. Serve more nontraditional students (usually 25 years old and older) seeking undergraduate education opportunities, especially those needing to upgrade their skills and knowledge to respond to the changing workplace.*
- 3. Serve additional students seeking graduate education programs, especially in math and science areas related to the state's economic development initiative.*

Initial Action Plan

Undergraduate Degree Programs: New Jersey should increase the capacity of colleges and universities in the state by 2010 and surpass the national average percentage (47 percent) of recent high school graduates who attend college within their state. Strengthening undergraduate capacity by expanding baccalaureate institutions and increasing transfer opportunities will be critical.

The following incremental targets are recommended based on projected growth in the number of high school graduates and the projected increase in the percent of students who will attend college within 12 months of graduation. If these targets are met, New Jersey will move from serving 40 percent of recent high school graduates to surpassing the current national average of 47 percent.

⁸ *Chronicle of Higher Education Almanac 2000-2001* and New Jersey Association of State Colleges/Universities, *College Countdown*, Vol. 3, No. 1.

<u>Year</u>	<u>Increased # of freshmen over 2002*</u> <u>(recent high school graduates only)</u>
Fall 2004	4,200
Fall 2006	9,000
Fall 2008	13,000
Fall 2010	14,000

While national projections indicate the number of nontraditional students in degree-granting programs will remain fairly level in the coming years, capacity to serve these students should also increase modestly to accommodate New Jersey employers' increasing demand for enhanced skill sets and associate and baccalaureate degrees.

<u>Year</u>	<u>Increased # of nontraditional*</u> <u>students over 2002</u>
Fall 2004	500
Fall 2006	1,000
Fall 2008	1,500
Fall 2010	2,000

If the above targets are met for traditional freshmen and nontraditional undergraduate students, and if student persistence rates remain constant, New Jersey's colleges and universities will need capacity to serve between 39,000 and 44,000 more full- and part-time undergraduates in 2010 than they currently serve. These numbers reflect the cumulative effect of the freshmen for the succeeding years they attend until graduation with current persistence rates applied. The actual number is dependent on the mix of full- and part-time students and two- and/or four-year degree paths, actual student persistence rates, and time to degree completion. It is, however, also a goal of this plan to increase persistence and success rates, which will put further pressure on capacity.

Graduate Degree Programs: Capacity should be increased for graduate level degrees, particularly in high-demand workforce areas. Over the past ten years, the average growth in full- and part-time graduate students enrolled was 1.2 percent. The following incremental targets for total students enrolled are recommended based on a continued average growth of 1.2 percent a year.

<u>Year</u>	<u>Increased # of graduate*</u> <u>students over 2002</u>
Fall 2004	1,500
Fall 2006	3,000
Fall 2008	4,500
Fall 2010	6,200

* Appendix C, pages 46-47

If these targets are met, New Jersey's colleges and universities will need capacity to serve an additional 6,200 full- and part-time graduate students in 2010.

Overall Growth (*Appendix C, page 46*): Total enrollment should increase annually through 2010, with a minimum increase of 3,400 full- and part-time undergraduate and graduate students in fall 2003, despite the significant fiscal constraints faced by institutions. By 2010, the potential increase in undergraduate and graduate students over 2002 should be between 45,000 and 50,000. The proposed growth will help to serve general statewide needs but should also specifically meet the needs of underserved areas of the state and groups that have been traditionally underserved.

Public Support for Increased Capacity: Increased investments in higher education are essential to support capacity increases. Adequate and reasonably predictable state operating support, ongoing capital assistance, and increased student assistance are critical components of the compact to achieve this and other objectives of the plan. While capacity increases will be accomplished through multiple means, significant state support for capital renovations and new construction will be necessary. State and county aid, as well as external funding sources, must keep pace with the planned level of growth in order to achieve this objective. (*See specific recommendations under resources section.*)

COMPONENT 2 – Multifaceted Strategies Necessary to Increase Capacity

Facilities and human resources expansion will be essential to meet the recommended growth targets, but colleges and universities should also achieve capacity increases through technology, possible new educational sites, interinstitutional collaborations, and enhanced productivity.

Initial Action Plan

Institutional Plans: By March 2004, each institution should develop a plan consistent with state needs and its mission to increase capacity, utilizing multiple strategies such as those referenced above. Each institution will make progress annually in achieving the goals of its plan within the parameters of its budget.

Enhanced Use of Technology: By January 2004, the Presidents' Council and the Commission should systematically encourage and facilitate extensive collaborative use of the statewide higher education network infrastructure, NJEDge.Net. Institutions should increase use and collaborative deployment of the technology resources beginning in the 2003-2004 academic year.

The NJEDge.Net Network Board and staff should collaborate with the Commission on Higher Education to develop baseline data by January 2004 and collect annual data

regarding the use of technology to increase capacity. By 2010, all institutions should have demonstrated an increase in capacity using technology.

Programs in Underserved Areas: The Commission on Higher Education will work in consultation with the Presidents' Council and Administration staff to develop by November 2004 a state incentive program to enhance collaboration and provide high-quality baccalaureate and graduate degree programs in underserved areas of the state, including the northwest, southeast, and coastal regions.⁹ The incentive program should provide seed money in fiscal 2006, and new or enhanced programs should be available at both the baccalaureate and graduate levels in each of the three underserved regions by September 2006.

Meeting High-Demand Program Needs: As capacity is increased, institutions will work collaboratively with the state to recruit and prepare more in-state and out-of-state students in high-demand program areas as identified through the fall 2003 Demand-Side Skills Assessment Project and subsequent workforce reports. (See specific recommendations on page 37.)

Meeting the Needs of an Increasingly Diverse Student Population: The Commission on Higher Education should work in consultation with the Presidents' Council to support institutional efforts to recognize and respond to the needs of an increasingly diverse student population through Education for Language Minority Students Grants, Special Needs Regional Centers, College Bound, the Educational Opportunity Fund, and other programs.

By December 2005, institutions should have expanded their professional development opportunities for faculty related to teaching and learning with a diverse student body, including students for whom English is a second language and those who have a disability.

The Commission should work with the Presidents' Council to establish by September 2004 a state initiative to expand faculty diversity. By 2010, faculty diversity should increase in all sectors consistent with the specific goals of the initiative.

⁹ New Jersey Commission on Higher Education, *The Capacity of New Jersey's Higher Education System: A Report to the Governor and Legislature*, April 1998.

OBJECTIVE III

SUPPORT FINANCIAL AID PROGRAMS THAT ENABLE NEW JERSEY STUDENTS FROM ALL BACKGROUNDS TO AFFORD HIGHER EDUCATION OF HIGH QUALITY.

RATIONALE

New Jersey is consistently among the leaders in the nation in the provision of need-based student financial assistance and has expanded merit-based aid during the past decade. The state ranks third in the nation in need-based aid and total grant dollars per full-time undergraduate student, sixth in the proportion of undergraduates receiving need-based aid, and seventh in the number of undergraduates receiving any form of aid.¹⁰ Merit-based aid has increased, and the state ranks tenth in the amount of dollars appropriated. The state's growing and increasingly diverse population will require expanded state investments in student financial assistance programs.

New Jersey's student financial assistance programs are rooted in the belief that educational opportunity for students serves not only those students but also the future economic and social well-being of the state. Historically, state support for undergraduate student financial assistance has been guided by three basic principles: access, affordability, and choice. Broadly defined, access refers to providing opportunities for all who desire to pursue higher education. Affordability refers to ensuring that cost barriers are reduced or eliminated. Choice refers to the ability to select among the range of colleges and universities in the state.

The current appreciable enrollment of students of color and other traditionally underrepresented students will continue to increase in New Jersey. U.S. Census 2000 data indicate that these segments of the student body have significantly lower family and household incomes and disproportionately higher representation in the state's neediest school districts.¹¹ These demographics suggest that future undergraduate student populations will require substantially increased levels of financial assistance and support to ensure improved levels of persistence and academic degree program completion.

While need-based aid should remain a priority, New Jersey should continue to provide a mixture of student financial assistance programs and options (i.e., grants, scholarships, loans, college savings plans) to make New Jersey colleges and universities affordable, accessible, and attractive to students from diverse economic backgrounds.

¹⁰ The National Association of State Student Grant & Aid Programs (NASSGAP), *32nd Annual Survey Report, 2000-2001 Academic Year*.

¹¹ U.S. Bureau of the Census, *Census 2000 Summary File 3*.

COMPONENTS TO ACHIEVE THE OBJECTIVE

COMPONENT 1 - Adequate Need-Based Student Aid

New Jersey has a long-standing commitment to need-based student financial assistance. Approximately 88 percent of the total state appropriation for student financial assistance is channeled through the need-based Tuition Aid Grants (TAG) and the Educational Opportunity Fund (EOF). These programs will need to keep pace with rising enrollment, rising costs, and changing demographics.

Initial Action Plan

Full-Time TAG: The Commission on Higher Education, Presidents' Council, and Higher Education Student Assistance Authority (HESAA) should analyze by December 2003 the establishment of a new goal that covers tuition for the neediest students at no less than the previous year's tuition levels.

The Commission, Council, and HESAA should recommend funding fiscal 2005 TAG grants for the lowest-income students at public institutions at no less than previous year tuition levels and adjust other award cells proportionately to maintain a lag of no greater than one year. Further, they should recommend implementation of statutory language regarding TAG for independent colleges and universities (up to 50 percent of their weighted average tuition). The Governor and Legislature should consider including that strategy in the fiscal 2005 budget and beyond.

Part-Time TAG: There are compelling needs for both full- and part-time TAG. HESAA should evaluate the newly established part-time TAG program and consult with the Commission and Presidents' Council on the future potential and expansion of the program.

Federal Financial Aid: The Commission, Council, and HESAA should encourage the state's Congressional representatives to support increases in federal student financial aid, especially Pell grants.

Educational Opportunity Fund: The Educational Opportunity Fund (EOF) Board, in collaboration with the Commission and Council, should strengthen collaboration between EOF and the various precollegiate programs across the state by July 2004 and respond continually to the statewide increase of EOF-eligible students.

The Commission, Council, and Board should jointly recommend increased EOF funding in fiscal 2005 and annually thereafter as necessary. The funds should be directed to strengthen foundational EOF support services, including, but not limited to, counseling and tutoring to improve student success rates. Additional funds will also be necessary and

should be recommended to assist students with rising costs and to serve a larger number of students as institutional enrollments increase.

The Governor and Legislature should strive to include increased EOF funding in the fiscal 2005 budget and beyond to enhance services and increase the number of students served as general enrollment increases. Retention and graduation rates should be benchmarked to measure improvement, and increases for campus programs should be linked to program outcomes.

COMPONENT 2 – Undergraduate Merit-Based Aid

New Jersey has gradually increased funding for merit-based undergraduate grants during recent years. While approximately 12 percent of the current student aid allocation is designated for merit-based scholarships, the state's student assistance programs continue to be primarily need-based. A lack of dependable, annual merit-based state appropriations will significantly reduce the ability of institutions to attract high-achieving students and will mean a continued significant exodus of top students. (New Jersey ranks sixth in the nation in outmigration of its recent high school graduates.¹²)

Initial Action Plan

HESAA, in collaboration with the Commission and the Presidents' Council, should make recommendations regarding distribution of merit-based aid by January 2004. The Governor and Legislature should consider including the funding for merit-based aid in the fiscal 2005 budget and beyond based on the recommendations.

COMPONENT 3 – Graduate and Professional Student Aid

Labor force requirements for employees with masters and doctoral degrees are rapidly increasing, particularly in high demand fields. New Jersey's public and private sectors need well-prepared, highly skilled leaders at the graduate level from colleges and universities in the state to meet those needs.

Initial Action Plan

Based on the results of the Demand-Side Skills Assessment Project, the Commission on Higher Education will identify by December 2003 workforce areas in high-demand fields with the greatest need for individuals with advanced degrees and set goals with the Presidents' Council to meet that need.

HESAA should review, in consultation with the Commission and the Presidents' Council, the feasibility of creating a graduate and professional student assistance program. The

¹² U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics*, 2002, June 23, 2003.

program would primarily encourage students to complete advanced degrees in those areas where the most pressing labor force needs exist. If determined advisable, HESAA, the Commission, and the Council should make a joint recommendation to the Governor and Legislature to establish such a program by September 2004 for inclusion in the fiscal 2006 budget. The Governor and Legislature should consider including the recommendation in the fiscal 2006 budget and beyond.

OBJECTIVE IV

ESTABLISH AND IMPLEMENT FUNDING POLICIES AND METHODOLOGIES THAT PROVIDE SUFFICIENT AND REASONABLY PREDICTABLE STATE OPERATING SUPPORT AND ONGOING STATE CAPITAL INVESTMENTS FOR THE PUBLIC RESEARCH UNIVERSITIES, THE STATE COLLEGES AND UNIVERSITIES, THE COMMUNITY COLLEGES, AND THE INDEPENDENT INSTITUTIONS TO PROVIDE THE FUNDAMENTAL INFRASTRUCTURE NECESSARY TO ACHIEVE THE STATE'S VISION FOR HIGHER EDUCATION.

RATIONALE

Adequate and reasonably predictable state support for college and university operations is essential to create and sustain a higher education system that is among the best in the world; to enable individuals to achieve their maximum potential; to improve the quality of life; and to support the state's success in the global, knowledge-based economy.

Nationally, the successful collaborative efforts of government, higher education, and the private sector have set states apart as economic leaders. New Jersey must also assume a similar leadership role, building on its abundance of human, geographical, commercial, and industrial assets through investments in higher education and research that underlie economic competitiveness and quality of life.

The creation of a higher education system that is among the best in the world requires a new compact between the state and its public and private colleges and universities. While the higher education institutions have a variety of responsibilities for effective and efficient operations, delivery of high-quality programs and student services, demonstration of successful student outcomes, significant scholarship and research, and attainment of external revenues, they are dependent on the state to varying degrees for fundamental financial support. Excellence in teaching and learning, research, and public service to accomplish broad state economic and societal goals hinges on this support.

The three public research universities, nine state colleges and universities, nineteen community colleges, and fourteen independent institutions in New Jersey all receive varying levels of state operating and capital assistance. All of these colleges and universities derive their operating and capital revenues from differing combinations of direct state appropriations, tuition and fees, federal support, and private gifts and grants. The community colleges also receive widely varying county support. Cohesive planning and effective operation of colleges and universities to meet student and state needs require clear state support policies and methodologies.

New Jersey law establishes state funding levels for the community colleges and the independent institutions, but the established levels are contingent on annual appropriations and have not been fulfilled. There has been no clear funding policy or

methodology for the public research universities or the state colleges and universities since the 1980s, resulting generally in across-the-board annual increases or decreases for all twelve institutions without regard to enrollment, programmatic need, or other considerations. There is no stream of revenue dedicated solely for higher education.

It is understandable that predictability of state operating appropriations for all sectors is affected by the state's overall fiscal condition in a given year. However, state funding predictability and adequacy have been lacking even in the best of fiscal climates, which is apparent in comparing higher education budget increases and decreases over time with those of the state budget and New Jersey's gross state product (Appendix C, page 48). This lack of adequate and predictable funding impedes efficient and effective management of institutions and predictability of student tuition and fees.

Over the past decade, higher education support has not kept pace with need, and in the last two years, the level of state support has been diminished. New Jersey, like most other states, has experienced serious budget deficits since fiscal 2002. As a result, state support for higher education has been limited. Fortunately, New Jersey has avoided the drastic cuts made in many states, which have led to extreme increases in student tuition and fees.

At the same time, rapidly changing demographics and workplace needs are placing far greater demands on higher education each year, leaving the state with a pressing need to enhance teaching and research and efficiently increase capacity to serve more students. It is critical to the economic and societal well-being of New Jersey for the state to commit to increased investments in higher education through clear funding methodologies that are consistent with the state's vision and the other six principal objectives for higher education. An increased state investment should, in turn, leverage increased external support. Further, increased state funding should be linked clearly to state priorities (such as capacity increases and quality enhancement) and more specific key performance measures that will evolve in Stage 2 of the planning process. A commitment to increased public funding and institutional achievement of performance measures is the foundation of the new compact to achieve New Jersey's vision for higher education.

COMPONENTS TO ACHIEVE THE OBJECTIVE

COMPONENT 1 – Operating Support for Public Research Universities and State Colleges and Universities

Of all the higher education institutions in New Jersey, the three public research universities and the nine state colleges and universities rely to the greatest extent on state operating aid, including annual operating support and funding for contractual salary increases and fringe benefits. There is no law or state policy, however, regarding state operating support levels or methodologies for these institutions.

For close to two decades, annual state operating support for the public research universities and state colleges and universities has not recognized enrollment growth or development of new academic programs. In addition, direct annual capital appropriations for maintenance and renewal have been sporadic and limited. As a result, these twelve public institutions have relied significantly on tuition and fees to meet annual maintenance and renewal costs as well as the cost of unfunded salary increases, enrollment growth, and programmatic development. The lack of any funding methodology or policy to provide adequate funding has created, to some degree, a disincentive to the growth and development of the state's institutions.

The Commission on Higher Education has a long-standing policy proposal that the state should pay two-thirds of the operating costs for the senior public institutions, but to date that policy recommendation has not guided state appropriations.¹³ In fact, the state share has decreased almost every year since fiscal 1988 and was approximately 56 percent in fiscal 2002 (Appendix C, page 48). The state percentage share has dropped further over the past two years due to a decrease in state support, ensuing from severe state budget constraints. The result is that as costs have increased steadily, students have paid an ever-increasing share of the cost of their education.

The state should strive to make high-quality education services available to the increasingly diverse and growing population, and the reliance on tuition and fees to meet annual cost increases at the public research universities and the state colleges and universities should be minimized.

Initial Action Plan

Public Research Universities: Consistent with Objective VII of the long-range plan and the new compact, a funding methodology for the public research universities should be designed to improve (1) the overall educational excellence of the universities, (2) collaboration in teaching, research, and service, and (3) the state's competitiveness for federal and other support for biomedical, biotechnology, and related research.

Consideration should be given to developing peer and aspirant institutions for the restructured universities to, among other things, compare funding levels and types and to help guide overall funding.

The enhanced quality and increased capacity envisioned within the plan calls for an additional investment in the state's public research universities – consistent with the compact. Specific support recommendations related to the restructuring of the public research universities are being developed by the Review, Planning and Implementation Steering Committee, which is guiding the proposed restructuring. But whatever the outcome of the restructuring proposal, it is important to recognize that an additional annual investment in these institutions is essential to maintain general operations.

¹³ For UMDNJ, the recommended state operating support level is 90 percent, with students paying the remaining 10 percent.

For fiscal 2005, consideration should be given to an initial restoration of \$80.2 million in state operating support to bring state funding levels to the original 2002 appropriation. In addition, the state should strive to fully fund the salary program to cover negotiated increments and cost-of-living adjustments and continue to provide fringe benefits. The total increase is estimated to be approximately \$122 million. While much of the increased appropriation will be restoration funds, the institutions should continue to strive to address state priorities related to quality and capacity.

Estimated annual operating increases through 2010 to simply cover core costs, including negotiated salary increases, fringe benefits, inflationary increases on the remainder of the budget, and a one-percent enrollment growth in the next three years, are projected as follows:

FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
\$79.2 m.	\$101 m.	\$67.3 m.	\$70.3 m.	\$73.4 m.

If the state were to provide the entire increase each year and tuition and fees stayed constant, the state would come close to achieving the two-thirds share of operating support for Rutgers and NJIT in 2010. If tuition and fees were increased modestly during this period, the state would still move closer to the two-thirds share of operating support. Similarly for UMDNJ, if the state provided the entire increase each year and tuition and fees were held level, the state would move toward the longstanding goal of a 90 percent state share of operating support (Appendix C, pages 49-50).

State Colleges and Universities: Consistent with this plan's vision to create a system of higher education that is among the best in the world, the New Jersey Association of State Colleges and Universities should work with the Commission and the Administration to develop, by June 2004, a specific funding methodology and plan for investment for these institutions. The methodology should enable the state colleges and universities, each within a context appropriate to its mission, to (1) achieve overall excellence in teaching, research, and service; (2) contribute to the state's competitiveness for federal support in programs aligned with state needs; and (3) create high quality public higher education options for citizens of New Jersey and attract talented students from other states and nations. Consideration should be given to defining peer and aspirant institutions for each of the nine state colleges and universities. Comparisons with peer and aspirant institutions should help guide development and implementation of a funding methodology and investment plan.

In the interim, an investment in the state colleges and universities is essential to maintain general operations without significantly increasing the financial burden on students and their families. For fiscal 2005, the goal should be restoration of \$37.4 million to bring state funding levels to the original fiscal 2002 appropriation for each of the nine colleges. In addition, the state should strive to fully fund the salary program to cover state-negotiated increments and cost-of-living adjustments and continue to provide fringe benefits. The total increase is estimated to be approximately \$66 million. While it is

recognized that much of this increased appropriation will be restoration funds, the institutions should continue to strive to address state priorities related to capacity and quality.

For fiscal 2006 to 2010, the base increases projected below reflect estimated annual operating increases simply to cover the core costs of negotiated salary increases, fringe benefits, inflationary increases on the remainder of the budget, and a one-percent enrollment growth in the next three years.

FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
\$54.9 m.	\$74.4 m.	\$45.4 m.	\$47.4 m.	\$49.6 m.

If the state were to provide the entire increase each year and tuition and fees stayed constant, the state would move significantly closer to achieving the two-thirds share of operating support by 2010. If tuition and fees were increased modestly during this period, the state would also move closer to the two-thirds share, and additional funding would be available to meet some other institutional needs (Appendix C, pages 49-50).

COMPONENT 2 – Community College Operating Support

New Jersey statutes set forth a state operating support level for the community colleges, but state support has never met the statutory level, and there is often little predictability regarding increased support from one year to the next. While the statute calls for the state to support 43 to 50 percent of the community college operating costs, the state has been focused recently on trying to get county, student, and state levels each to one-third. The state funds are distributed among the community colleges by formula, which is driven primarily by full-time equivalent students.

While access is central to the community college mission, tuition and fees accounted for 43.2 percent of community college budgets in fiscal 2002, which is high compared with other states. County support varies widely across the state, and county maintenance of support will be critical in trying to get the student share to one-third. While the percentage of funding from the state has improved from 24.7 percent in fiscal 1994 to 28.6 percent in fiscal 2002, it has yet to reach one-third (Appendix C, page 48).

Initial Action Plan

The goal of increasing the state share of funding for community colleges to approximately one-third by fiscal 2010 should be linked to a compact to address state priorities (such as increased capacity and enhanced quality). Based on the current level of state support of \$180,386,000 (approximately \$1,706 per full-time equivalent student), an additional \$17,500,000 in state operating aid is recommended for each year – fiscal 2005

through 2010 – to move toward a one-third state share. Funding may need to be adjusted to recognize enrollment changes (Appendix C, page 51).

Counties should work to establish and maintain support for one-third of the operating costs of community colleges by 2010.

COMPONENT 3 – Independent College and University Support

The Independent College and University Assistance Act was passed in 1972 and revised in 1979. The act provides state support to independent colleges and universities that serve a public mission. Annual funding is based on the number of full-time equivalent New Jersey undergraduates enrolled during the prebudget year at eligible independent institutions multiplied by 25 percent of direct per student support in the state colleges and universities during the prebudget year. The actual level of funding has fluctuated, with the highest level achieved in 1988 at 95.5 percent (Appendix C, page 52). The fiscal 2004 budget includes \$22.7 million, which equates to 71.8 percent of the funding formula.

Initial Action Plan

The goal of fully funding the Independent College and University Assistance Act by fiscal 2010 should be linked to a commitment to address state priorities (such as increased capacity and enhanced quality). The following targets, based on fiscal 2003 full funding at \$32,175,000 (22,500 students x \$1,430),* are recommended to achieve the goal:

- By fiscal 2006, achieve 80 percent of full funding at approximately \$25,740,000 (an additional \$5.74 million).
- By fiscal 2008, achieve 95 percent of full funding at approximately \$28,958,000 (an additional \$3.218 million).
- By fiscal 2010, achieve 100 percent of full funding at approximately \$32,175,000 (an additional \$3.217 million).

*The actual full-funding number for each year will vary based on (1) the number of students served by the independent institutions and (2) the level of state support for the state colleges and universities.

COMPONENT 4 – Funds for Capital Needs

Historically, the state has provided funding assistance for major capital construction and renovation through the periodic issuance of state bonds. These bonds have benefited the public research universities, the state colleges and universities, community colleges, and independent institutions at varying funding levels, with between 89 and 94 percent of the

funds historically committed to public institutions. However, the capital bond programs have not compared favorably to support for facilities construction and renovation at public colleges and universities in many other states or kept pace with the need to preserve existing campuses and expand to meet growing demands.

New Jersey's public research universities and state colleges and universities have assumed a share of the cost for many state bond programs and have had increasingly to rely on their own debt for facility investment; they are now among the most leveraged public higher education institutions in the nation, according to bond rating agencies.¹⁴ The resulting debt service generally falls to students through tuition or fees. Unlike states that are known for the quality of their higher education systems, New Jersey has passed on, by default, a very large share of responsibility for construction, renovation, and maintenance of capital facilities to these public institutions and their students.

Like their counterparts across the nation, the independent institutions rely to a larger degree on their own bonding capacity. New Jersey has historically extended a portion of the state capital bond programs, ranging from six to eleven percent, to the independent institutions, and these institutions have assumed a share of the cost of the debt on many bond programs. Several other states also provide some capital support to public-mission independent colleges and universities.

The community colleges have also assumed a share of the cost of periodic state bond programs. In addition, the community colleges alone benefit from a 1971 statute ("Chapter 12"), which provides a revolving fund for construction and renewal with half of the debt service covered by the state and half by the county government. Periodic increases of the ceiling of the fund are necessary to keep pace with need. Similar and more recent statutes were intended to be a continuing source of revenue to provide adequate and predictable support for construction and renovation in all sectors. They have not, however, been refunded to provide ongoing capital assistance for facilities renewal or construction.

Over the past five years, many states have passed large general obligation bond issues for higher education capital needs. Several states that are economic leaders have provided billions of dollars, primarily to public institutions, to build their higher education infrastructures (e.g., North Carolina - \$3.1 billion). Such significant investments are essential to compete with the best higher education systems in the world.

As reported through a summer 2003 Commission on Higher Education questionnaire, the public and independent institutions have unmet academic and administrative capital needs through 2010 of over \$5.8 billion. Included in that amount is more than \$450 million in deferred maintenance and close to \$600 million in capital equipment and technology projects.

¹⁴ Moody's Investors Service, *Special Comment: New Jersey Public University Ratings, Stable Despite State Downgrade*, March 2002.

The inadequacy of New Jersey's investment in capital facilities for its senior public colleges and universities is particularly notable and has created not only a heavy burden for the operational budgets of these institutions but also a massive shortage of adequate facilities on the campuses. The senior public institutions reported in response to the 2003 questionnaire an unmet academic and administrative capital need of more than \$3.7 billion through 2010. These institutions are already carrying more than \$1.2 billion in debt for their facilities. That debt will increase substantially for a number of the senior public institutions in fiscal 2004 and subsequent years.

Funding mechanisms to support extensive capital needs in New Jersey are a critical element of the state's long-range plan. While capacity increases will be accomplished by multiple means, capital funds will be essential for renovation and new construction to preserve existing capacity and expand facilities to accommodate a large portion of the increased enrollments. Enhanced and expanded facilities will also be essential to achieve other state goals.

Initial Action Plan

Capital Bond Issue: The Commission on Higher Education and Presidents' Council began preliminary steps to prepare for a November 2004 bond referendum to support widespread capital needs at public research universities, state colleges and universities, community colleges, and independent colleges and universities that receive state funding. The Commission worked with the institutions during July and August of 2003 to complete a capital needs analysis to provide the empirical support for the development of the bond issue.

In summer and fall 2003, the Commission and Council collaborated with the Administration to plan for the potential bond issue. Legislation will be necessary and should be passed prior to July 1, 2004, in order to be on the November 2004 ballot.

Additional Capital Aid: The Commission should work with the public research universities, the state colleges and universities, and the Administration to develop an annual capital program for regular renewal and replacement of facilities at these twelve state institutions in order to plan rationally for the maintenance of the state's higher education assets.

The Commission should work with the Presidents' Council and the Administration to develop a long-term plan for higher education capital needs.

Greater Financing Flexibility: The Educational Facilities Authority should work with the state Treasurer and other stakeholders, including rating agencies, to consider creating options, such as working capital loans to institutions, a state credit support mechanism, and innovative financings, that provide greater financing flexibility to the colleges and universities in order to lower their financing costs without incurring additional cost or

debt for the state. A review of options and the advisability of implementation will be completed by December 2003.

If implementation is recommended, legislation should be considered by February 2003 with a goal of enactment by July 2004.

COMPONENT 4 – External Funds

Revenues for higher education come primarily from state and local appropriations, student tuition and fees, and various external funding sources. While adequate and predictable state support is essential, the level of external funding is also an important factor in the competitiveness and support of institutions. When compared with other states that have highly regarded colleges and universities, New Jersey receives lower levels of funding from private gifts and contracts, endowment income, or federal grants and contracts generated by four-year colleges and universities. Once peer and aspirant institutions are identified for the public research universities and state colleges and universities, specific goals can be set to increase external revenues at New Jersey's public four-year colleges and universities.

Initial Action Plan

By 2010, four-year colleges in New Jersey should leverage state appropriations and tuition and fees and increase their revenues from private gifts and contracts, endowment income, and federal grants and contracts to be more competitive with peer and aspirant institutions across the nation.

OBJECTIVE V

ENCOURAGE AND ENHANCE COORDINATION AND COLLABORATION BETWEEN AND AMONG ALL EDUCATIONAL INSTITUTIONS IN THE STATE, INCLUDING P-12 SCHOOLS AND ASSOCIATE AND BACCALAUREATE DEGREE-GRANTING INSTITUTIONS, TO FACILITATE TRANSITION FROM EACH EDUCATIONAL LEVEL TO THE NEXT, TO DEVELOP MUTUALLY BENEFICIAL PARTNERSHIPS, AND TO IMPROVE THE QUALITY OF TEACHING AND LEARNING AT ALL LEVELS.

RATIONALE

The entire education system, from preschool through graduate school, must work together effectively and efficiently and be held accountable for meeting the needs of students and the state.

National reports indicate the need for higher education to (1) align curriculum and expectations across educational sectors, (2) support students in the transition from high school to college, and (3) improve teacher quality. New Jersey will be well served by coordination of efforts, joint endeavors, shared or pooled resources, systemic collaboration among sectors and among institutions, and efficient transfer of students from associate degree-granting to baccalaureate degree-granting institutions.

COMPONENTS TO ACHIEVE THE OBJECTIVE

COMPONENT 1: Alignment of P-12 and Higher Education (P-20)

The smooth transition of students between high school and college requires alignment between higher education admissions-related requirements and prekindergarten to grade 12 (P-12) curriculum frameworks, standards, and assessments. Failure to develop such alignments has an impact on student decisions to attend college, the need for remediation, retention rates, time to degree completion, and potential duplication of courses.

Initial Action Plan

The Department of Education, Presidents' Council, and Commission on Higher Education should develop specific strategies and projects to increase alignment between the P-12 education system and higher education. The Department, Council, and Commission should create targeted working groups as needed to develop and implement strategies that will better align P-12 and higher education.

- The pilot project to establish a preschool-to-graduate-school collaboration and alignment framework in the eight southern counties should be a primary focus in 2003-2004 and provide guidance for future systemic statewide alignment efforts.
- By June 2004, strategies should be developed to address the need for correlating higher education admissions-related requirements and college placement tests with P-12 curriculum frameworks, standards, and the High School Proficiency Assessment in order to smooth the transition to college and decrease the extent of college-level remediation.
- Colleges and universities should actively participate in the Department of Education's twelfth-grade options pilot program in 2003 and 2004, creating options, such as increased college course availability and other experiences, for high school seniors who have satisfied all graduation requirements at completion of the junior year. The options will enhance the students' development and preparation for the future. In 2005, the two-year assessment of the twelfth-grade pilot program should be completed, and if successful, colleges and universities should significantly expand their participation to support a statewide program.

COMPONENT 2 – Teacher Preparation, Retention, and Recruitment

Teacher quality is the primary influence on student-learning outcomes. There is likely to be a demand for more than two million new teachers in this decade.¹⁵ Up to 50 percent of teachers leave the profession within five years.¹⁶ In addition, New Jersey has specific critical shortage areas, such as math, science, and special education, and the state needs hundreds of certified preschool teachers to fulfill the mandate of the Abbott v. Burke Supreme Court decision. There are four critical challenges facing higher education institutions and schools:

- *To prepare substantially more teachers*
- *To systematically work to retain teachers in the profession*
- *To ensure that teachers have the skills necessary to improve student achievement with an increasingly diverse student population*
- *To ensure sufficient teachers in particular fields and types of districts*

Initial Action Plan

The following strategies should be collaborative priorities:

- Consistent with the federal “No Child Left Behind” requirements, New Jersey (“house”) standards should be crafted collaboratively with the Department of

¹⁵Emily Feistritzer, *The Making of a Teacher*, The Center for Education Information, 1999.

¹⁶Kathleen Szuminski, “Teacher Development in CTE,” *In Brief*, no. 21 (2003).

Education to define a “highly qualified teacher.” Colleges and universities should offer programs across the state for teachers who do not currently meet the federal or New Jersey standards. Furthermore, this initiative presents an excellent opportunity for a consortial response to teacher needs using, in part, technology.

- By June 2004, the Department of Education should estimate the number of additional teachers needed by 2010 and work with the Commission on Higher Education and Presidents’ Council to establish by October 2004 a long-term plan to ensure that enough qualified P-12 teachers are educated to meet that demand by 2010.
- By September 2004, the Commission should complete an assessment of the outcomes of current recipients of the Commission’s three teacher education grant programs, discuss the results with the Presidents’ Council and Department of Education, and, if warranted, propose to expand such grants beginning in fiscal 2006.
- As the state moves to standards-based regulations for the preparation of educators, colleges and universities should implement standards-based reform in their teacher and administrator preparation programs. For initial implementation in 2003-2004, at least two colleges with teacher/administrator preparation programs should be active partners in a pilot program. All teacher/administrator preparation programs should be standards-based and should also be nationally accredited by 2006.
- In an effort to retain teachers longer and improve teacher quality, colleges and universities with teacher preparation programs should play an active role in providing mentoring and induction support for beginning teachers. By 2005, teacher mentoring programs across the state should provide positive induction experiences, which are reflected in improved retention rates of new teachers.
- The community colleges and senior institutions should continue working with the Department of Education to create new standards-based, high-quality alternate route options for teacher certification. By summer of 2004, at least three or four additional institutions of higher education will participate in extending the Department’s current Master of Arts in Teaching alternate route option. By January 2005, there will be sufficient high-quality, standards-based alternate route options to provide access to all who are interested.
- The Department and Commission should collaborate during 2004 to establish an improved database regarding teacher preparation, retention, and professional development.

COMPONENT 3 – Stimulating Partnerships

There is a wealth of P-12 and higher education partnerships of various sizes and scopes. Some are institutionalized, and others are dependent on the continuing dedication and interest of a few individuals. Those that provide simultaneous renewal and improvement of schools and teacher education are particularly effective. To address longstanding problems, the state should capitalize on and stimulate local, regional, and statewide partnerships that are highly successful.

Initial Action Plan

By October 2004, the Department, Commission, and Presidents' Council should create and distribute an inventory of P-12 and higher education partnerships.

By November 2004, the Department and Commission should recognize and recommend incentives for exemplary partnerships, especially those with Abbott districts, which seek to close the academic achievement gap between economically or educationally disadvantaged students and other segments of the population, and/or to provide ongoing, standards-based preparation and professional development of educators.

The Department and Commission should increase incentives for professional development schools and similar systemic partnerships that benefit and improve both the schools and the colleges that prepare new educators and provide professional development opportunities.

COMPONENT 4 – Articulation and Transfer

Student transfer is an important issue that requires effective collaboration between educational institutions and has extensive cost and capacity implications for students and institutions. Seamless student transfer from associate to baccalaureate institutions is critical to student mobility and goal completion. Interinstitutional articulation agreements are an essential component in the smooth progress of students among institutions with little or no loss of credit and status. Such agreements shorten the time to degree completion and application of skills and knowledge while building confidence in and support for New Jersey's colleges and universities.

The Presidents' Council and Commission on Higher Education are overseeing a New Jersey Statewide Transfer Initiative to promote the development and implementation of (1) articulation agreements between community colleges and baccalaureate institutions; (2) transfer standards, including standards regarding general education; and (3) mechanisms for enhanced communication about program changes and other issues affecting seamless transfer between institutions. The initiative serves as the preeminent source of information regarding the transfer of community college courses to baccalaureate institutions. While considerable progress has been made, critical work and increased collaboration is still necessary to achieve seamless student transfer.

Initial Action Plan

The Presidents' Council and Commission on Higher Education, with advice and assistance from the Articulation and Transfer Coordinating Committee, should continually promote the seamless transfer of students between associate and baccalaureate institutions.

- Each year, the Presidents' Council and Commission on Higher Education should anticipate needs for the future viability of the NJ Statewide Transfer Initiative and

develop a plan for continued support. A combination of ongoing state support and other funding sources should be considered.

- By December 2003, the New Jersey Statewide Transfer Initiative staff should review course equivalencies to determine and report the actual level of institutional course acceptance.
- By the end of 2003, the original participating four-year institutions should complete the review of courses for the 19 community colleges. New four-year institutions joining NJ Transfer should complete the equivalencies within one year of agreeing to participate in the initiative. Additionally, new/modified courses are to be submitted by the community colleges on an ongoing basis for review by the four-year institutions. This review will be completed on a regular basis as the new/modified courses are submitted, in order to maintain the accuracy and currency of the data.
- By January 2004, the Presidents' Council and Commission on Higher Education should renew their commitment to articulation and transfer policy and implementing principles, including transfer standards.
- In spring 2004, the Commission on Higher Education and Presidents' Council should hold a transfer and articulation seminar for faculty, academic officers, and presidents of community colleges and baccalaureate institutions. The seminar should provide an opportunity to review articulation and transfer policy and principles and discuss additional means of improving the student transfer experience.
- By December 2004, the Presidents' Council's Articulation and Transfer Committee should complete an initial survey regarding transition experiences of community college students who transfer to a New Jersey baccalaureate institution. The survey will measure progress and identify barriers to seamless transfer and strategies and policies for removing these barriers.
- In 2004, 2005, and 2006, the Presidents' Council should review the number of student transfers through dual degree programs and the factors that influenced success or difficulties. By September 2006, the Presidents' Council should assess and review the outcomes of students who transferred to baccalaureate institutions through dual degree programs.
- By June 2005, students should have access to all information necessary for a seamless, efficient transfer from New Jersey community colleges to baccalaureate institutions in New Jersey.
- By July 2005, the New Jersey Statewide Transfer Initiative staff should establish an online inventory of all courses, including descriptions, offered by New Jersey's institutions.

OBJECTIVE VI

ENCOURAGE AND EXPEDITE SYSTEMIC, INNOVATIVE, AND INSTITUTIONALIZED PARTNERSHIPS AND OTHER COLLABORATIONS BETWEEN HIGHER EDUCATION AND OTHER SECTORS OF SOCIETY, INCLUDING BUSINESS AND INDUSTRY, THE NONPROFIT SECTOR, AND THE PUBLIC SECTOR TO HELP MEET THE STATE'S MOST PRESSING WORKFORCE NEEDS AND TO CREATE NATIONALLY COMPETITIVE PROGRAMS OF RESEARCH AND DEVELOPMENT.

RATIONALE

Intellectual capital underpins the state's future prosperity in an economy that is driven by knowledge, information, and technology. Human development and economic development are interrelated and depend substantially on higher education. All types of colleges and universities have opportunities and responsibilities for workforce training, because New Jersey competes with other states and other nations for high-tech entrepreneurs, companies, and technically trained workers.

Similarly, research and development are critical to the advancement of knowledge and societal well-being. The future productivity and competitiveness of the state's economy depend on maintaining a strong research and development environment for New Jersey businesses, and the presence of high-quality research universities is a vital element in the synergy among successful research-dependent businesses and the higher education sector.

New Jersey's recently established Jobs Growth and Economic Development Commission will recommend strategies to create and sustain linkages between higher education and industry, attract additional federal and other research funds, and assure that New Jersey's workforce is trained to meet demands of the knowledge-based economy.

COMPONENTS TO ACHIEVE THE OBJECTIVE

COMPONENT 1 – Establish Systemic Institutional and Industry Partnerships to Meet Workforce Demands

Workforce development is one key function for the state's higher education system that must adapt to emerging industries and the skills they need in their workforce to sustain New Jersey's economic competitiveness.

Initial Action Plan

The Commission on Higher Education and Presidents' Council should collaborate with the John J. Heldrich Center for Workforce Development at the Edward J. Bloustein School of Planning and Public Policy at Rutgers University and the Department of Labor to hold a conference in fall 2003. Results of the Demand-Side Skills Assessment Project should be presented, focusing on the education and skill needs of key New Jersey industries. Colleges and universities should develop strategies to respond to identified program needs.

The Commission should periodically report on the education and skill needs of key New Jersey industries and monitor higher education responsiveness.

Institutions should develop systemic partnerships with other colleges and universities and business and industry to meet higher education-related workforce needs identified in the demand-side reports.

As institutions increase their capacity to serve additional students, specific efforts should be made to address the acute higher education needs of the five major fields identified by the Jobs Growth and Economic Development Commission (see page 9) and other key fields in which higher education is greatly needed. As a result of increased capacity of institutions and systemic higher education and business and industry partnerships, a significantly greater percentage of the key needs of industries will be met by New Jersey colleges and universities.

For fiscal 2006, enhanced support for customized training should be considered in targeted areas through the state's Workforce Development Partnership program.

Targeted support should be considered in fiscal 2006 for programs that provide a pipeline to meet workforce needs in areas with longstanding shortages such as math and science. Specific efforts should be made to address needs in healthcare and other professions that are severely stressed.

An additional \$2 million should be considered for the state's College Bound Program to enhance the programs and assist up to 1,500 more disadvantaged students in grades 6-12 to complete secondary school and successfully pursue a postsecondary education in the sciences, mathematics, or technology.

COMPONENT 2 – Increase Linkages Between Corporate and Institutional R&D

Over 140,000 scientists and technicians are employed in more than 500 research and development laboratories in New Jersey, and over \$8 billion is spent on private R&D in the state annually – more per worker than in any other state. New Jersey is a hub of corporate research and a leading state for R&D investments, but the state's higher

education institutions lag behind the nation's per capita federal funding, which is partly explained by the state's relatively small higher education system.

The federal government has increased science and engineering-related funding significantly over the past several years, and New Jersey's public research universities, like many others across the nation, benefited by increasing their federal R&D dollars. The major emphasis of the increased federal funding has been directed toward interdisciplinary research as well as research in the life sciences, information and communication technology, and national security. New Jersey's industry profile reflects strong commercial interests in the same research areas. The extent to which New Jersey universities become more competitive for these research dollars is critical. Increasing New Jersey's national ranking in aggregate share of federal research dollars will influence the state's attractiveness for businesses by providing excellent opportunities for the exchange of scientists, research, commercialization of intellectual property, and an educated and trained workforce.

Initial Action Plan

The Jobs Growth and Economic Development Commission is creating recommendations to respond to these challenges. Their recommendations will be integrated into this plan. In addition, it is likely that the restructured research universities will focus efforts, in part, on strengthening the transfer of university intellectual property to business development.

OBJECTIVE VII

RESTRUCTURE THE PUBLIC RESEARCH UNIVERSITIES TO IMPROVE (1) THE OVERALL EDUCATIONAL EXCELLENCE OF THE UNIVERSITIES; (2) COLLABORATION IN TEACHING, RESEARCH, AND SERVICE; AND (3) THE STATE'S COMPETITIVENESS FOR FEDERAL AND OTHER SUPPORT FOR BIOMEDICAL, BIOTECHNOLOGY, AND RELATED RESEARCH.

The action plan for this objective is under development by the Review, Planning and Implementation Steering Committee and will be integrated in Stage 2.

CONCLUSION

This plan calls for a new **compact** between higher education and the state to prepare students for the future, support economic development, and enhance quality of life in New Jersey. It proposes an unprecedented level of state funding that is commensurate with the levels in other states that aspire, as New Jersey does, to national leadership. In return, higher education proposes a comprehensive response to state needs – from increasing capacity to improving quality, from increasing research to improving the state's economy, from increasing the quality and number of teachers to improving collaboration among educational sectors. In addition, higher education proposes to be held more accountable for its performance in the areas outlined in the plan. Performance measures will be fully developed, in consultation with stakeholders, during the next phase of the plan development.

These are extraordinary times: exciting because of the emergence of a knowledge-based economy, challenging because of the constraints on the state budget. As part of the new compact, higher education pledges to expand its resource base not only through state dollars, but also by increasing research funding, expanding private giving, accelerating internal efficiencies, and launching additional collaborative efforts (especially utilizing technology).

This is a long-term plan. It recognizes that investments and fundamental changes must be phased in. There is an urgency to begin, yet achievement of desired results will require time, collaboration, and persistence by all stakeholders. The plan proposes that the state make a **significant investment** in higher education, and that higher education, in turn, commit to a **measurable return** on that investment.

New Jersey stands at a crossroads. A handful of states will separate themselves from the others by harnessing the intellectual power of their colleges and universities to propel their economies forward and to increase the quality of life for all residents. This plan seeks to firmly establish New Jersey among those special states.

APPENDIX A **SUMMARY OF ACTION PLAN GOALS**

QUALITY: Primary Action Plan Goals

- Make steady progress toward institutional faculty composition targets
- Strengthen development programs for full- and part-time faculty members
- Achieve institutional goals to improve key student outcome measures
- Impart lifelong civic responsibility through public service on and off campus
- Increase New Jersey's national ranking in aggregate share of federal research dollars from 20th to at least 15th
- Collaborate to promote opportunities to commercialize intellectual property
- Seek external investments and make state investments to support research and workforce development in major business and industry fields
- Award sufficient associate and baccalaureate degrees to support major business and industry fields
- Increase the number of graduates with advanced science and math degrees
- Collaborate to seek external funding for institutional quality initiatives
- Implement a public awareness campaign to raise the visibility and enhance the reputation of New Jersey's colleges and universities
- Track progress in implementing the long-range plan and revise to reflect changing circumstances
- Link state funding increases to principal state objectives and performance measures

CAPACITY: Primary Action Plan Goals

- Increase capacity to serve more students in all sectors
- Increase capacity to serve an additional 39,000 to 44,000 full- and part-time undergraduate students and an additional 6,200 graduate students
- Increase state, county, and external operating, capital, and student aid to support capacity increases
- Use multiple strategies to increase capacity, including technology enhancements, expanded facilities, collaboration, and increased human resources
- Establish additional baccalaureate and graduate degree program opportunities in underserved areas of the state
- Recruit and prepare more students from in and out of state in high-demand program areas
- Anticipate and respond to the needs of the increasingly diverse student population
- Develop and oversee initiatives to expand faculty diversity in all sectors

RESOURCES: Primary Action Plan Goals

- Fund Tuition Aid Grants (TAG) for students at public institutions on a one-year lag and fund students at independent institutions pursuant to statute
- Evaluate part-time TAG program and expand as appropriate
- Strengthen Educational Opportunity Fund (EOF) support services and increase funding for student grants as costs and enrollments increase
- Maintain funding for merit-based student aid and evaluate distribution of funds

- Develop a graduate and professional student assistance program if determined advisable
- Restore funding to FY 2002 levels for public research universities and state colleges and universities for FY 2005
- Develop funding methodologies for public research universities and state colleges and universities that recognize annual core operating increases
- Link funding methodologies for public research universities and state colleges and universities to state goals, considering peer and aspirant institutions
- Provide state support for community colleges that is linked to state goals and equivalent to one-third of operational costs
- Provide state support for independent colleges and universities pursuant to statute and linked to state goals
- Provide a significant general obligation bond for higher education capital needs that are consistent with state priorities
- Develop pay-as-you-go capital program for public research universities and state colleges and universities
- Review options that provide greater capital financing flexibility and implement if deemed advisable
- Increase levels of private/external funding for institutions

COLLABORATION: Primary Action Plan Goals

- Develop strategies to increase alignment between P-12 and higher education and decrease the need for college-level remedial course work
- Focus on the pilot project in eight southern counties to develop a preschool-to-graduate-school collaboration and alignment framework to guide systemic statewide alignment
- Support the 12th grade pilot program to enhance student development and preparation
- Provide opportunities for teachers who do not currently meet federal or NJ standards
- Increase enrollment sufficiently to provide enough qualified P-12 teachers
- Provide standards-based teacher/administrator preparation programs
- Provide mentoring and induction programs to improve retention rates
- Create new alternate route options for teacher certification
- Provide incentives for and recognition of exemplary P-12 and higher education partnerships
- Increase incentives for professional development schools and similar partnerships
- Promote and enhance the seamless transfer of students between institutions
- Develop and support systemic business/higher education interactions and partnerships
- Increase institutional capacity to address key workforce needs in major fields
- Increase support for College Bound and other pipeline programs in areas of shortage
- Strengthen the transfer of university intellectual property to business development
- Integrate the recommendations of the Jobs Growth and Economic Development Commission to increase linkages between corporate and institutional research

RESTRUCTURING: Primary Action Plan Goals

Specific goals for the restructuring of the public research universities will be developed by the Review, Planning and Implementation Steering Committee and its several working and advisory groups.

Appendix B

	KEY PERFORMANCE MEASURES	CATEGORIES	OBJECTIVES
A	New Jersey's colleges and universities will make defined annual progress toward providing access to high-quality higher education opportunities for between 406,000 and 411,000 students, an increase of 45,000 to 50,000 students.	Quality, Capacity, Collaboration, Resources	I, II, III
B	Coordination and collaboration between and among educational institutions will increase in measurable ways to improve student achievement and success, to expand access, and to enhance efficiency.	Quality, Capacity, Collaboration	I, II, V
C	Alignment between higher education admissions-related requirements and P-12 curriculum frameworks, standards, and tests will decrease the need of recent high school graduates for college-level remediation by defined annual percentages.	Collaboration Quality	V
D	Colleges and universities will achieve their institution-specific student outcome improvement targets through defined annual progress.	Quality	I
E	Both the percentage of full-time undergraduate students who complete their baccalaureate degrees in four years or less, and the percentage of full-time undergraduates who complete their baccalaureate degrees in six years, will increase by at least 10 percent through defined annual progress.	Quality, Capacity, Collaboration	I, II
F	The retention and graduation rates of a steadily increasing number of low-income and minority students will increase by at least 20 percent through defined annual progress.	Quality, Capacity	I, II, III
G	As enrollments increase, colleges and universities will prepare significantly more graduates in high-demand areas to meet the most critical workforce needs identified for New Jersey.	Capacity, Quality, Collaboration	I, VI, VII
H	The level of employer satisfaction with student preparedness for the workforce will increase by a minimum of 25 percent from a baseline established in 2004.	Quality, Collaboration	I, VI, VII
I	New Jersey will increase its current national ranking of 20th to at least 15th in aggregate share of federal research dollars.	Quality, Resources, Collaboration	I, IV, VI, VII
J	State support and steadily increasing university competitiveness for federal and other research dollars will lead, where consistent with mission, to greater commercialization of intellectual property from the baseline established in 2004.	Quality, Resources, Collaboration	I, IV, VI, VII

	KEY PERFORMANCE MEASURES	CATEGORIES	OBJECTIVES
K	New Jersey colleges and universities will attain increased regional and national recognition of institutional programs and achievements through defined institutional efforts in targeted areas.	Quality	I, VII
L	As enrollments increase, state funding for student financial aid programs will be expanded proportionately each year to meet the needs of the growing number of eligible students.	Resources, Capacity	II, III
M	State policies and funding methodologies for operating support of colleges and universities in each sector will be linked to state goals, and annual funding will be consistent with methodologies and defined state targets.	Quality, Capacity, Resources	I, II, III, VII
N	The state will provide significant additional capital support for higher education to enhance quality and preserve and expand campuses consistent with defined annual capacity targets and other principal state objectives.	Quality, Capacity, Resources	I, II, IV, VII
O	Colleges and universities will increase private, nontuition revenues by a defined annual percentage.	Resources, Quality	IV, VI, VII

PRINCIPAL STATE OBJECTIVES

- I. *Achieve and sustain higher levels of excellence in teaching and learning, research, and public service in all sectors, valuing differences in institutional missions and using resources effectively and efficiently.*
- II. *Support targeted, multifaceted increases in capacity and specific state and campus programs to: (1) prepare a growing and increasingly diverse population for responsible citizenship in a democratic society, and (2) attract more New Jersey students to New Jersey institutions and prepare them for high-demand occupations.*
- III. *Support financial aid programs that enable New Jersey students from all backgrounds to afford higher education of high quality.*
- IV. *Establish and implement funding policies and methodologies that provide sufficient and reasonably predictable state operating support and ongoing state capital investments for the public research universities, state colleges and universities, community colleges, and independent institutions to provide the fundamental infrastructure necessary to achieve the state's vision for higher education.*
- V. *Encourage and enhance coordination and collaboration between and among all educational institutions in the state, including P-12 schools and associate and baccalaureate degree-granting institutions, to facilitate transition from each educational level to the next, to develop mutually beneficial partnerships, and to improve the quality of teaching and learning at all levels.*
- VI. *Encourage and expedite systemic, innovative, and institutionalized partnerships and other collaborations between higher education and other sectors of society, including business and industry, the nonprofit sector, and the public sector to help meet the state's most pressing workforce needs and to create nationally competitive programs of research and development.*
- VII. *Restructure the public research universities to improve (1) the overall educational excellence of the universities; (2) collaboration in teaching, research, and service; and (3) the state's competitiveness for federal and other support for biomedical, biotechnology, and related research.*

APPENDIX C
Supporting Data and Explanations

Projected Enrollment of Recent High School Graduates in New Jersey (page 13)

<u>Year</u>	<u>HS Graduates</u>	<u>In-State Enrollment</u>	
		<u>#</u>	<u>%</u>
1999	82,043	30,501	37%
2000	82,904	31,222	38%
2001	84,006	32,058	38%
2002	86,820	34,728	40%

Source: *WICHE (Western Interstate Commission for Higher Education).*

NJ Dept of Education, Vital Education Statistics.

NCES, Digest of Education Statistics. IPEDS, Residence and Migration (biennial).

NJ IPEDS, Freshman Residence Form.

Educational Attainment by State: Census 2000 (page 14)

Persons 25 years old and over

State	HS graduate or higher (%)	Bachelor's degree or higher (%)
Massachusetts	84.8	33.2
Colorado	86.9	32.7
Connecticut	84.0	31.4
Maryland	83.8	31.4
New Jersey	82.1	29.8

SOURCE: U.S. Bureau of the Census, *Census 2000 Summary File 3.*

Residence and migration of all first-time students graduating from high school in the past 12 months enrolled in 4-year Title IV degree-granting institutions, fall 2000. (page 14)

State	Students enrolled in institutions located in the jurisdiction	Student residents of state attending college		Migration of students			
		in any jurisdiction	in home jurisdiction	Out-of	Into	Net	%
Vermont	5,100	3,511	1,444	2,067	3,656	1,589	58.9%
New Hampshire	7,727	6,975	2,945	4,030	4,782	752	57.8%
Connecticut	16,159	19,246	8,403	10,843	7,756	-3,087	56.3%
Hawaii	2,630	4,160	1,834	2,326	796	-1,530	55.9%
Wyoming	1,274	1,915	855	1,060	419	-641	55.4%
New Jersey	22,109	40,925	18,291	22,634	3,818	-18,816	55.3%

NOTE: IPEDS does not collect enrollment data from institutions located in foreign countries. "State unknown" represents cases where the student's home state cannot be determined.

NOTE: First-time students include first-time, first-year degree-seeking undergraduate students, both full-time or part-time.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Integrated Postsecondary Education Data System.*

Estimated enrollment growth was based on the following data and assumptions. (pages 15 & 16)

Projected Enrollment at 56 NJ Institutions of Higher Education (Headcount)

	<u>Fall 2002</u>	<u>Projected Growth</u>	<u>Enrollment by 2010</u>
Undergraduates	305,246	39,000 -- 44,000	344,246 -- 349,246
Graduates	56,235	6,200	62,435
Total	361,481	45,000 -- 50,000	406,681 -- 411,681

Factors such as retention rates, time to degree, enrollment patterns, and economic conditions will affect this projection.

Projected Undergraduate Enrollment Increases (Headcount)

<u>Year</u>	<u>Recent High School Graduates</u>		
	<u>Fall 2002</u>	<u>Estimated Enrollment</u>	<u>Estimated Increase</u>
2004	34,728	38,928	4,200
2005	34,728	41,028	6,300
2006	34,728	43,728	9,000
2007	34,728	46,128	11,400
2008	34,728	47,728	13,000
2009	34,728	48,328	13,600
2010	34,728	48,728	14,000

Enrollment increases for traditional students were based on projected growth in high school graduates and the goal of increasing the percentage of recent high school graduates who attend college in NJ.

<u>Nontraditional Students (25 & older)</u>	
<u>Year</u>	<u>Estimated Increase</u>
2004	500
2005	750
2006	1,000
2007	1,250
2008	1,500
2009	1,750
2010	2,000

National data on nontraditional students points to a relatively steady enrollment growth. Based on employer demand for workforce education and training in New Jersey, modest growth in the enrollment of nontraditional students is projected over the six-year period 2004 – 2010 to assist in meeting those workforce needs.

Estimated enrollment growth was based on the following data and assumptions (continued)

Projected Undergraduate Enrollment Increases (Headcount) Adjusted for Persistence of First-Time Freshmen

	<u>Traditional</u>	<u>Non-Traditional</u>	<u>Adjusted Total</u>
2007	4,790	525	5,315
2008	6,720	775	7,495
2009	9,160	1,179	10,339
2010	14,000	2,000	16,000
Cumulative	34,669	4,479	39,149
Total			

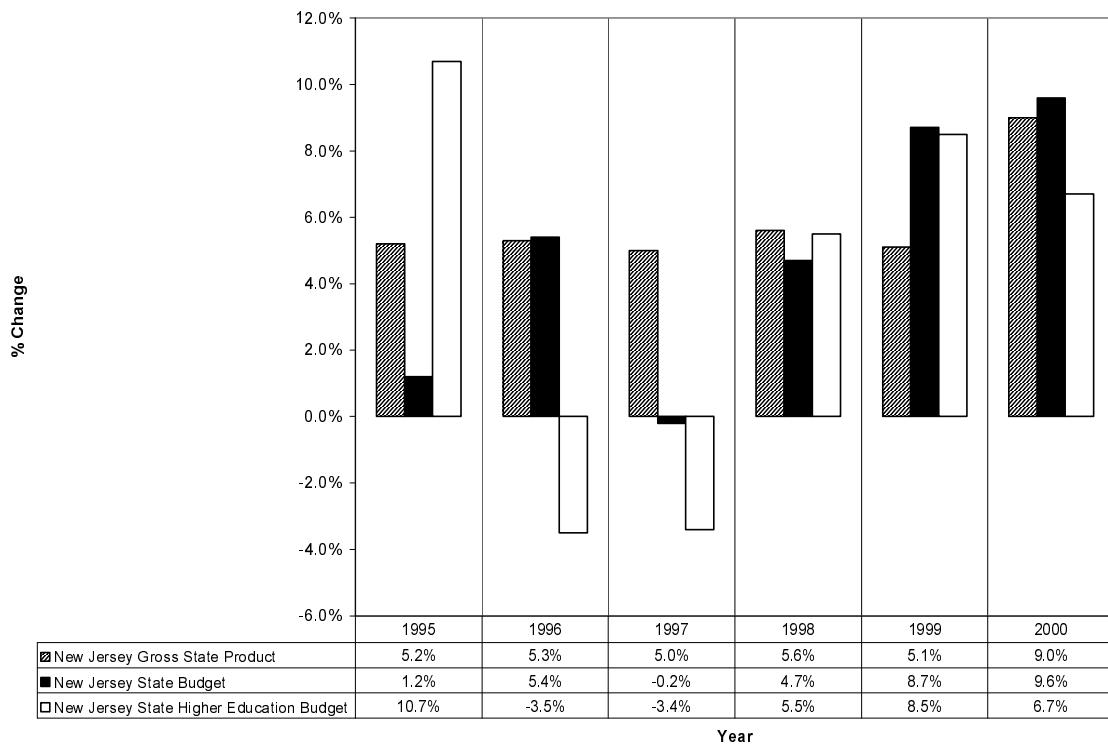
To estimate the number of "additional students" that would still be enrolled in 2010, each of the preceding 3 years' estimated enrollment growth was prorated between 4-year and 2-year enrollments, and current retention rates were then applied to these numbers. The adjusted totals for the 3 years were then added to the projected number of additional freshmen for 2010 in order to calculate the total increase in enrollment in 2010.

Projected Enrollment Increases (Headcount) of Graduate Students

<u>Year</u>	<u>Total Fall 2002</u>	<u>Graduates Estimated Enrollment</u>	<u>Graduates Estimated Increase</u>
2004	56,235	57,735	1,500
2005	56,235	58,435	2,200
2006	56,235	59,235	3,000
2007	56,235	59,935	3,700
2008	56,235	60,735	4,500
2009	56,235	61,535	5,300
2010	56,235	62,435	6,200

The graduate student enrollment increase projection was based on continuing the 1.2% average annual growth for the past ten years.

NJ GSP vs. State Budget vs. Higher Education Budget 1995-2000 (page 23)



Shares of Operating Aid (page 24 & 26)

<u>Senior Public Institutions</u>									
Tuition & Fees	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02
State	36.2%	36.4%	37.7%	39.7%	41.3%	42.8%	43.3%	43.4%	43.8%
	63.8%	63.6%	62.3%	60.3%	58.7%	57.2%	56.7%	56.6%	56.2%
<u>Community Colleges</u>									
Tuition & Fees	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02
State	41.1%	42.0%	43.5%	43.7%	43.5%	42.5%	41.8%	41.3%	43.2%
County	24.7%	24.0%	24.0%	23.7%	24.8%	26.3%	27.7%	28.6%	28.6%

Methodology Utilized to Estimate Core Support Levels for Public Research Universities and State Colleges and Universities (FY2005-FY2010) (pages 25 & 26)

Summary: The methodology used here projects only the essential general operations costs for the public research universities and the state colleges and universities through FY2010. Increases are projected for salaries, benefits, and nonsalary expenditures through FY2010, along with a 1% enrollment growth in FY2005-FY2007. This level of support does not include specific increases associated with additional enrollment growth, ongoing capital needs and debt service, or the quality improvements necessary to create and sustain higher education institutions that are among the best in the world.

Establishing the Base Year for Calculations:

These calculations are based on the FY2004 state appropriations act; tuition/fee percentage increases; and fringe benefits, estimated at 6% above the FY2003 figures. Fringe benefits are separated out, and the remainder is allocated between salary costs and nonsalary costs using percentage shares reflective of institutional expenditure patterns.

Recommended State Support Increases for FY2005

For FY2005, fringe benefits are increased by another 6%, while a “restoration” appropriation (consisting of the FY2002 original appropriation plus FY2005 salary program) is allocated between the salary and nonsalary cost areas.

Projecting Cost Increases from FY2006 to FY2010:

- **Salary costs** are increased by the new AFT contract through FY2007. An average increase is then used to project salary increases from FY2008 to FY2010.
- **Nonsalary costs** are increased by 3.5% each year, based on an estimate using HEPI data.
- **Fringe benefits** are increased by 6% each year, based on the average increase in state-paid fringe benefits from FY1999-FY2003.
- **Enrollment growth** is projected at 1% per year for FY2005-FY2007.

Allocation of Costs through FY2010: This model illustrates what it would cost the state to cover all of the costs for the core increases shown above, while holding tuition and fees constant in order to make significant progress in moving toward a two-thirds state share of operating costs. The following page shows the effect this model would have on the percentage shares by FY2010; it also shows the effect that a 3% annual tuition increase would have on the cost shares.

Shares of Operating Aid Based on Core Support Model (pages 25&26)

Based on the assumptions on the preceding page, the cost shares in FY2010 would be at the following levels under two scenarios. The first scenario shows the cost shares if tuition and fees revenue remain at the FY2004 level. The second scenario shows the cost shares if tuition and fees increase by 3% to provide additional funding to meet some other institutional needs.

Public Research Universities

Rutgers, General University and New Jersey Institute of Technology

Assume No Tuition and Fees Increase (FY2005-FY2010)

FY2010

Tuition & Fees	36.7%
State Support	63.3%

Rutgers, General University and New Jersey Institute of Technology

Assume 3% Tuition and Fees Increase (FY2005-FY2010)

FY2010

Tuition & Fees	40.9%
State Support	59.1%

University of Medicine and Dentistry

Assume No Tuition and Fees Increase (FY2005-FY2010)

FY2010

Tuition & Fees	13.0%
State Support	87.0%

University of Medicine and Dentistry

Assume 3% Tuition and Fees Increase (FY2005-FY2010)

FY2010

Tuition & Fees	15.1%
State Support	84.9%

State Colleges and Universities

Assume No tuition and Fees Increase (FY2005-FY2010)

FY2010

Tuition & Fees	38.0%
State Support	62.0%

Assume 3% Tuition and Fees Increase (FY2005-FY2010)

FY2010

Tuition & Fees	42.3%
State Support	57.7%

Community College Operating Support

(page 26)

The following targets, based on the current level of state support of \$180,386,000 (approximately \$1,706 per FTE), are recommended to move to a one-third state share:

- By fiscal 2005, receive an additional \$17,500,000 for a total of \$197,886,000.
- By fiscal 2006 receive an additional \$17,500,000 for a total of \$215,386,000.
- By fiscal 2007 receive an additional \$17,500,000 for a total of \$232,886,000.
- By fiscal 2008, receive an additional \$17,500,000 for a total of \$250,386,000.
- By fiscal 2009 receive an additional \$17,500,000 for a total of \$267,886,000.
- By fiscal 2010 receive an additional \$17,500,000 for a total of \$285,386,000.

Methodology Utilized to Determine Community College Proposal:

1. Cost per FTE was calculated based on historical trends (audited data for FY1992 – FY 2001) and on best estimates for FY2002 – FY 2004.
2. This figure was multiplied by estimated FTEs for FY2004 to get Total Expenditures. This amount was reduced by 4% to account for “other” revenue.
3. In order to determine the total amount of expenditures anticipated in FY2010, Cost per FTE was increased by 3% per year and FTEs were increased by 1% per year for FY2005 – FY2007. No enrollment growth was built into the model for FY2008 – FY2010. Cost per FTE was then multiplied by FTEs for 2010. The amount was reduced by 4% to determine Total Adjusted Expenditure for FY 2010. One-third of this amount represents the state share for 2010.
4. State aid in 2004 was then subtracted from the 2010 state share. The result was divided by 6 to determine the annual budget increase necessary to achieve 1/3, 1/3, 1/3 by 2010.
5. Funding may have to be adjusted to account for enrollment growth.

ICUAA Funding History (page 27)

	<u>Gap From Full Funding</u>	<u>% of Full Funding</u>
FY2004	(\$8,949,968)	71.78%
FY2003	(\$7,690,000)	76.10%
FY2002	(\$5,222,180)	82.99%
FY2001	(\$5,438,185)	82.28%
FY2000	(\$5,657,822)	80.42%
FY1999	(\$6,190,135)	77.44%
FY1998	(\$6,228,685)	76.47%
FY1997	(\$7,185,530)	72.18%
FY1996	(\$3,463,644)	85.36%
FY1995	(\$4,137,373)	82.86%
FY1994	(\$6,208,320)	77.20%
FY1993	(\$4,715,261)	80.94%
FY1992	(\$6,461,168)	75.60%
FY1991	(\$8,988,628)	69.50%
FY1990	(\$3,879,172)	85.94%
FY1989	(\$1,299,404)	94.90%
FY1988	(\$997,140)	95.50%

New Jersey Commission on Higher Education
P.O. Box 542, Trenton, New Jersey 08625-0542

Telephone: (609) 292-4310
Facsimile: (609) 292-7225
Email: nj_che@che.state.nj.us
Web site: www.nj.gov/highereducation